

Serial No. 10/692,999

Docket No. NG(ST)7617

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REMARKS

Claims 1-19 are currently pending in the subject application, and are presently under consideration. Claims 1-19 are rejected. Claims 1, 6, 13, and 14 have been amended. Claims 12 and 19 have been cancelled. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

Claim 1 has been amended to substantially recite the elements of claim 12, now cancelled. In the Advisory Action filed May 21, 2007 (hereinafter "Advisory Action"), the Examiner does not address the arguments set forth in the Response to the Office Action dated March 7, 2007, filed May 7, 2007, for any of the claims other than claim 1. Instead, the Examiner merely states "[a]s to Applicant's argument found on pages 3-12, see the final action for the response," (Advisory Action, page 2). Representative for Applicant respectfully submits that these arguments were first set forth in the Response to the Office Action dated March 7, 2007, such that the Examiner has not adequately addressed them by merely referring back to the Office Action dated March 7, 2007. Therefore, they are repeated below as now pertaining to amended claim 1.

Amended claim 1 recites implementing electronic speckle pattern interferometry to generate an image of substantially all of the face of a human subject that is a speckle-spot pattern of diffusely reflected coincident light corresponding to the face of the human subject. The Examiner asserts that Stirbl teaches these elements of cancelled claim 12 (Office Action dated March 7, 2007, page 14; citing Stirbl, col. 1, ll. 8-10; Abstract). Representative for Applicant respectfully disagrees.

Stirbl teaches remotely determining information regarding a person's emotional state based on a transmitted wireless waveform to determine such physiological parameters as blood pressure, pulse rate, pupil size, respiration rate, and perspiration level (Stirbl, Abstract). An ultrasonic or subsonic pressure wave which has been reflected from a blood vessel below the skin surface of the subject, such as at a retina or temple, can be implemented to determine the instantaneous blood flow rate or velocity (Stirbl, col. 3, ll. 26-31). Stirbl further teaches that blood pressure can also be ascertained by Doppler speckle interferometry to measure speed of

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pulses with average speed of blood (Stirbl, col. 3, ll. 42-45). However, there is no indication in the teachings of Stirbl that such Doppler speckle interferometry generates a speckle-spot pattern of diffusely reflected coincident light that corresponds to the face of the human subject, as recited in claim 12.

In rejecting claim 12 based on Stirbl, the Examiner asserts that a speckle pattern of the face can be obtained based on a determination of physical or physiological parameters from the iris (Office Action dated March 7, 2007, page 14; note that Representative for Applicant assumes that the Examiner intended "pupil", as opposed to "iris"). However, the Examiner's assertion is rather attenuated, as there is no teaching or suggestion in Stirbl to indicate that a speckle pattern of the face of a subject can be obtained, or that such a speckle pattern would be desirable or necessary to implement the methodology of Stirbl. As such, Representative for Applicant respectfully submits that such an assertion must be based on improper hindsight, such that the conclusion that a speckle pattern of the face can be obtained based on a determination of physical or physiological parameters from the pupil must have been gleaned only from the Applicant's disclosure. Therefore, neither Stirbl nor any of the other cited art, individually or in combination, teaches or suggests that generating the image comprises implementing electronic speckle pattern interferometry to generate a speckle-spot pattern of diffusely reflected coincident light that corresponds to the face of the human subject, as recited in amended claim 1. Consideration and allowance of claim 1, as well as claims 2-5 and 13-15 which depend therefrom, is respectfully requested.

Claim 6 has been amended to substantially recite the elements of claim 19, now cancelled. As described above, the Examiner does not address the arguments set forth in the Response to the Office Action dated March 7, 2007, filed May 7, 2007, for any of the claims other than claim 1 in the Advisory Action. Therefore, the arguments for claim 15, which recites substantially the same elements as claim 19, are presented below with regard to amended claim 6.

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Amended claim 6 recites obtaining a first image of substantially all of the face of the human subject at a beginning of a pulse period associated with a pulsed light source, obtaining a second image of substantially all of the face of the human subject at an end of the pulse period associated with the pulsed light source, and subtracting the second image from the first image to generate a resulting image of substantially all of the face of the human subject having a high contrast ratio. The Examiner asserts that Stirbl teaches these elements based on modulation of a light source and determining a change in intensity (Office Action, pages 15-16). Representative for Applicant respectfully disagrees, and respectfully submits that such a conclusion by the Examiner is not appreciative of the full language of the claim. Specifically, Stirbl teaches phase-lock modulation of an LED that emits light at a mouth of the subject (Stirbl, col. 13, ll. 44-52). Stirbl is silent as to a pulsed light source and a pulse period, and Representative for Applicant respectfully submits that it is incorrect to equate a phase-lock modulated LED as a pulsed light source. Furthermore, illuminating the mouth of a subject, as taught by Stirbl, is not considered substantially all of the face of the human subject, as recited in claim 15. Furthermore, Stirbl is silent as to subtracting one image from another to obtain a resultant image of substantially all of the face of the human subject having a high contrast ratio, as recited in amended claim 6. For all of these reasons, neither Stirbl nor any of the other cited art, individually or in combination, teaches or suggests claim 6. Consideration and allowance of claim 6, as well as claims 7-11 and 16-18 which depend therefrom, is respectfully requested.

With regard to the arguments for the remaining claims (*e.g.*, claims 3, 4, 9, 10, 13, and 14) as set forth in the Response to the Office Action dated March 7, 2007, Representative for Applicant respectfully maintains the arguments that these claims are patentable over the cited art for the reasons described in the Response to the Office Action dated March 7, 2007. Therefore, Representative for Applicant respectfully requests full consideration and allowance of these claims, or substantive responses to the arguments set forth in the Response to the Office Action dated March 7, 2007, barring allowance of these claims.

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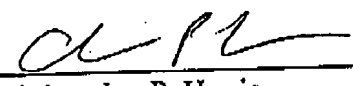
CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date

6/15/07
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